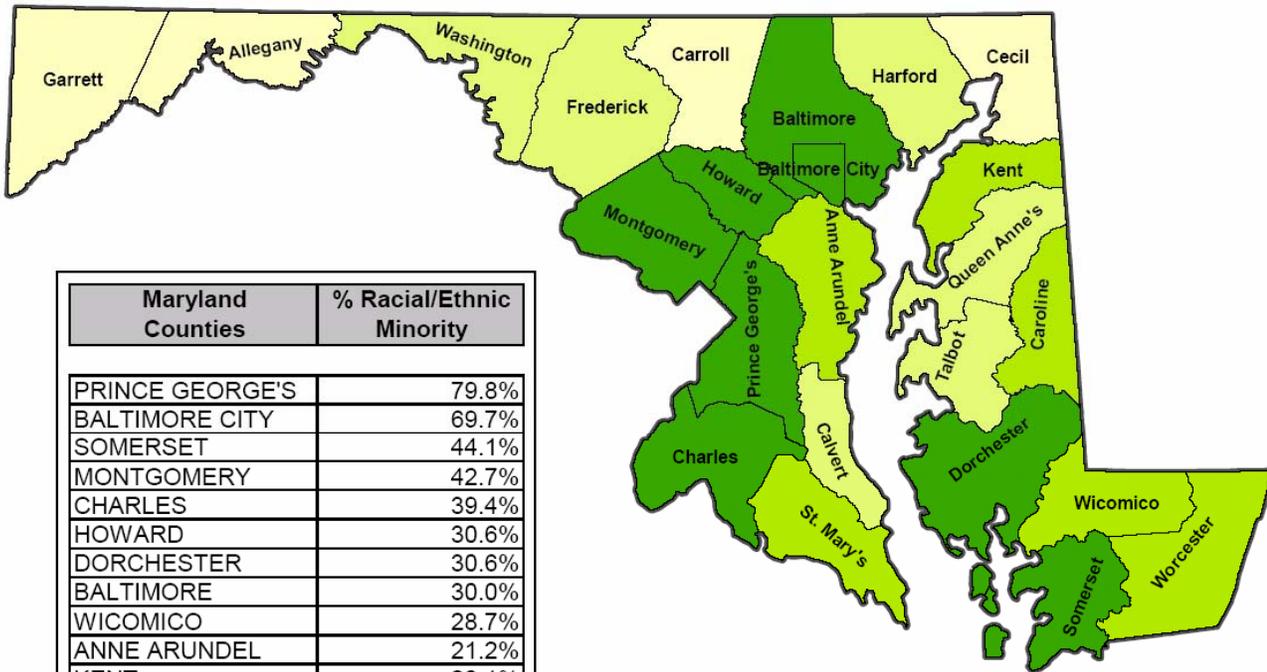


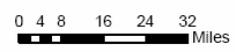
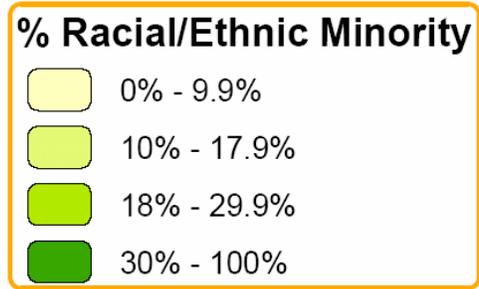
# Maryland Health Disparities Data Highlights

June 2007

Percent of Population that is Racial or Ethnic Minority, by Jurisdiction, Maryland 2004



Maryland Counties	% Racial/Ethnic Minority
PRINCE GEORGE'S	79.8%
BALTIMORE CITY	69.7%
SOMERSET	44.1%
MONTGOMERY	42.7%
CHARLES	39.4%
HOWARD	30.6%
DORCHESTER	30.6%
BALTIMORE	30.0%
WICOMICO	28.7%
ANNE ARUNDEL	21.2%
KENT	20.1%
ST MARY'S	19.0%
CAROLINE	18.9%
WORCESTER	18.2%
TALBOT	17.8%
CALVERT	16.3%
HARFORD	15.6%
FREDERICK	14.3%
WASHINGTON	11.8%
QUEEN ANNE'S	10.5%
CECIL	7.9%
ALLEGANY	7.4%
CARROLL	5.8%
GARRETT	1.3%
<b>MARYLAND TOTAL</b>	<b>39.6%</b>



## Minority Population in Maryland

- Maryland is quickly becoming a state where the combined racial and ethnic minority population will exceed the white population. The 2005 estimated Maryland population is 40.3 percent minority, up by 0.7 percentage points from the previous year (39.6%).
- Eight of twenty-four jurisdictions have 30 % or more minorities. Almost 20 percent of the population in the Eastern Shore is minority.

## Maryland Population, July 1 2005, by Race and Ethnicity

Race	All Ethnicity		Non-Hispanic		Hispanic	
White	3,622,922	64.7%	3,345,777	59.7%	277,145	4.9%
Non-white	1,977,466	35.3%	1,935,308	34.6%	42,158	0.8%
<i>Black</i>	1,672,296	29.9%				
<i>Asian / Pac     Isle</i>	284,370	5.1%				
<i>American     Indian</i>	20,800	0.4%				
<b>MD total</b>	<b>5,600,388</b>	<b>100.0%</b>	<b>5,281,085</b>	<b>94.3%</b>	<b>319,303</b>	<b>5.7%</b>

Source: Maryland Vital Statistics Annual Report 2005.

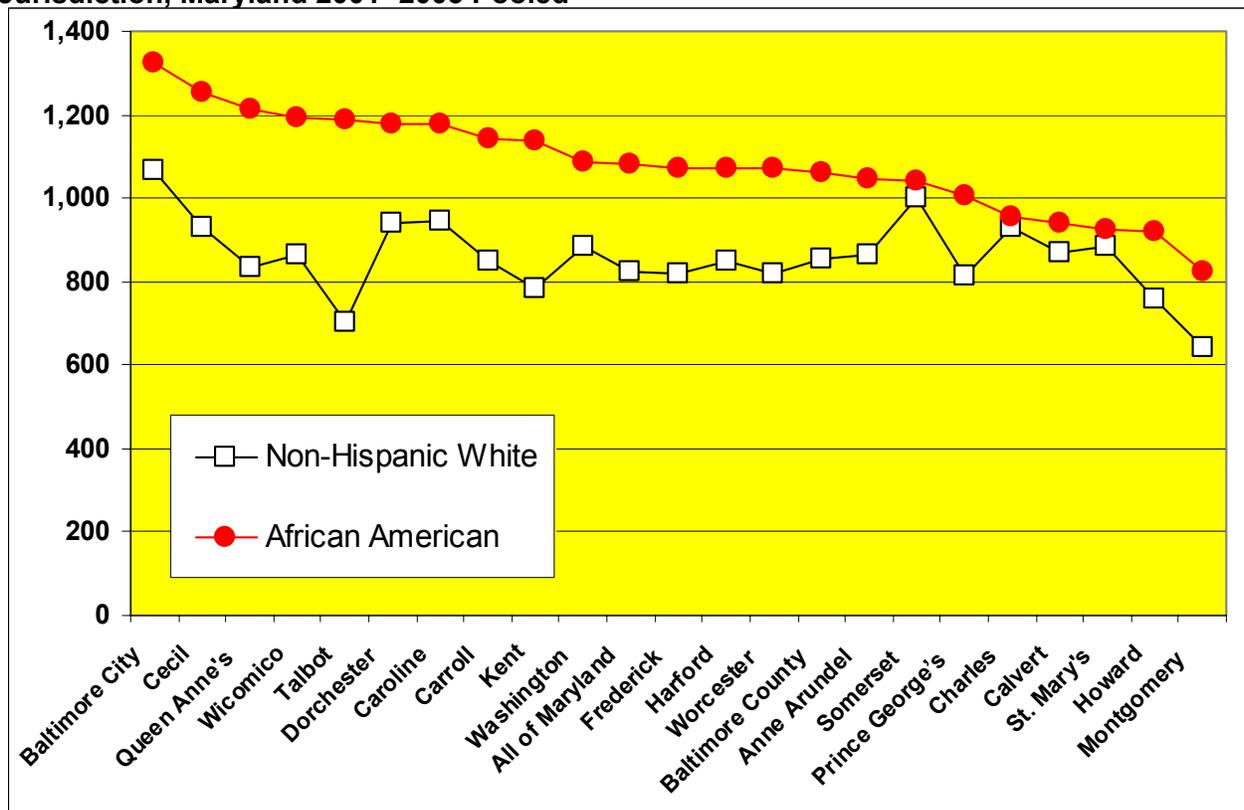
REGION AND POLITICAL SUBDIVISION	TOTAL	Non-Hispanic White	Minority Population	Percent Minority	Percent African American	Percent Asian/PI	Percent AI/AN	Percent Hispanic
<b>MARYLAND</b>	<b>5,600,388</b>	<b>3,345,777</b>	<b>2,254,611</b>	<b>40.3%</b>	<b>29.9%</b>	<b>5.1%</b>	<b>0.4%</b>	<b>5.7%</b>
<i><b>NORTHWEST AREA</b></i>	<b>466,144</b>	<b>407,591</b>	<b>58,553</b>	<b>12.6%</b>	<b>7.7%</b>	<b>2.0%</b>	<b>0.2%</b>	<b>2.9%</b>
GARRETT	29,909	29,518	391	1.3%	0.6%	0.2%	0.0%	0.5%
ALLEGANY	73,639	67,971	5,668	7.7%	6.2%	0.6%	0.1%	1.0%
WASHINGTON	141,895	124,491	17,404	12.3%	9.2%	1.2%	0.2%	1.9%
FREDERICK	220,701	185,611	35,090	15.9%	8.2%	3.2%	0.3%	4.6%
<i><b>BALTIMORE METRO AREA</b></i>	<b>2,610,063</b>	<b>1,675,932</b>	<b>934,131</b>	<b>35.8%</b>	<b>29.3%</b>	<b>3.8%</b>	<b>0.3%</b>	<b>2.7%</b>
BALTIMORE CITY	635,815	192,809	443,006	69.7%	65.6%	2.1%	0.4%	2.2%
BALTIMORE COUNTY	786,113	542,504	243,609	31.0%	24.4%	4.1%	0.3%	2.4%
ANNE ARUNDEL	510,878	399,262	111,616	21.8%	15.1%	3.2%	0.4%	3.6%
CARROLL	168,541	158,087	10,454	6.2%	3.1%	1.5%	0.2%	1.5%
HOWARD	269,457	183,240	86,217	32.0%	16.7%	11.4%	0.3%	4.0%
HARFORD	239,259	200,030	39,229	16.4%	12.0%	2.2%	0.3%	2.4%
<i><b>NATIONAL CAPITAL AREA</b></i>	<b>1,773,706</b>	<b>687,810</b>	<b>1,085,896</b>	<b>61.2%</b>	<b>40.9%</b>	<b>9.2%</b>	<b>0.4%</b>	<b>12.2%</b>
MONTGOMERY	927,583	525,146	402,437	43.4%	16.9%	13.8%	0.4%	13.6%
PRINCE GEORGE'S	846,123	162,664	683,459	80.8%	67.3%	4.2%	0.5%	10.7%
<i><b>SOUTHERN AREA</b></i>	<b>323,265</b>	<b>232,357</b>	<b>90,908</b>	<b>28.1%</b>	<b>23.2%</b>	<b>2.1%</b>	<b>0.5%</b>	<b>2.6%</b>
CALVERT	87,925	73,396	14,529	16.5%	13.1%	1.2%	0.3%	2.0%
CHARLES	138,822	81,181	57,641	41.5%	35.4%	2.6%	0.8%	3.1%
SAINT MARY'S	96,518	77,780	18,738	19.4%	14.8%	2.2%	0.4%	2.3%
<i><b>EASTERN SHORE AREA</b></i>	<b>427,210</b>	<b>342,087</b>	<b>85,123</b>	<b>19.9%</b>	<b>16.5%</b>	<b>1.1%</b>	<b>0.3%</b>	<b>2.3%</b>
CECIL	97,796	89,566	8,230	8.4%	5.2%	1.0%	0.3%	2.0%
KENT	19,899	15,915	3,984	20.0%	16.0%	0.9%	0.2%	3.3%
QUEEN ANNE'S	45,612	40,828	4,784	10.5%	8.0%	1.1%	0.2%	1.4%
CAROLINE	31,822	25,809	6,013	18.9%	14.3%	0.5%	0.6%	4.0%
TALBOT	35,683	29,369	6,314	17.7%	14.4%	1.0%	0.2%	2.6%
DORCHESTER	31,401	21,825	9,576	30.5%	27.8%	0.8%	0.2%	1.9%
WICOMICO	90,402	64,371	26,031	28.8%	24.2%	1.8%	0.3%	2.8%
SOMERSET	25,845	14,370	11,475	44.4%	42.0%	0.9%	0.3%	1.8%
WORCESTER	48,750	40,034	8,716	17.9%	15.1%	0.9%	0.2%	1.8%

Source: Maryland Vital Statistics Annual Report 2005.

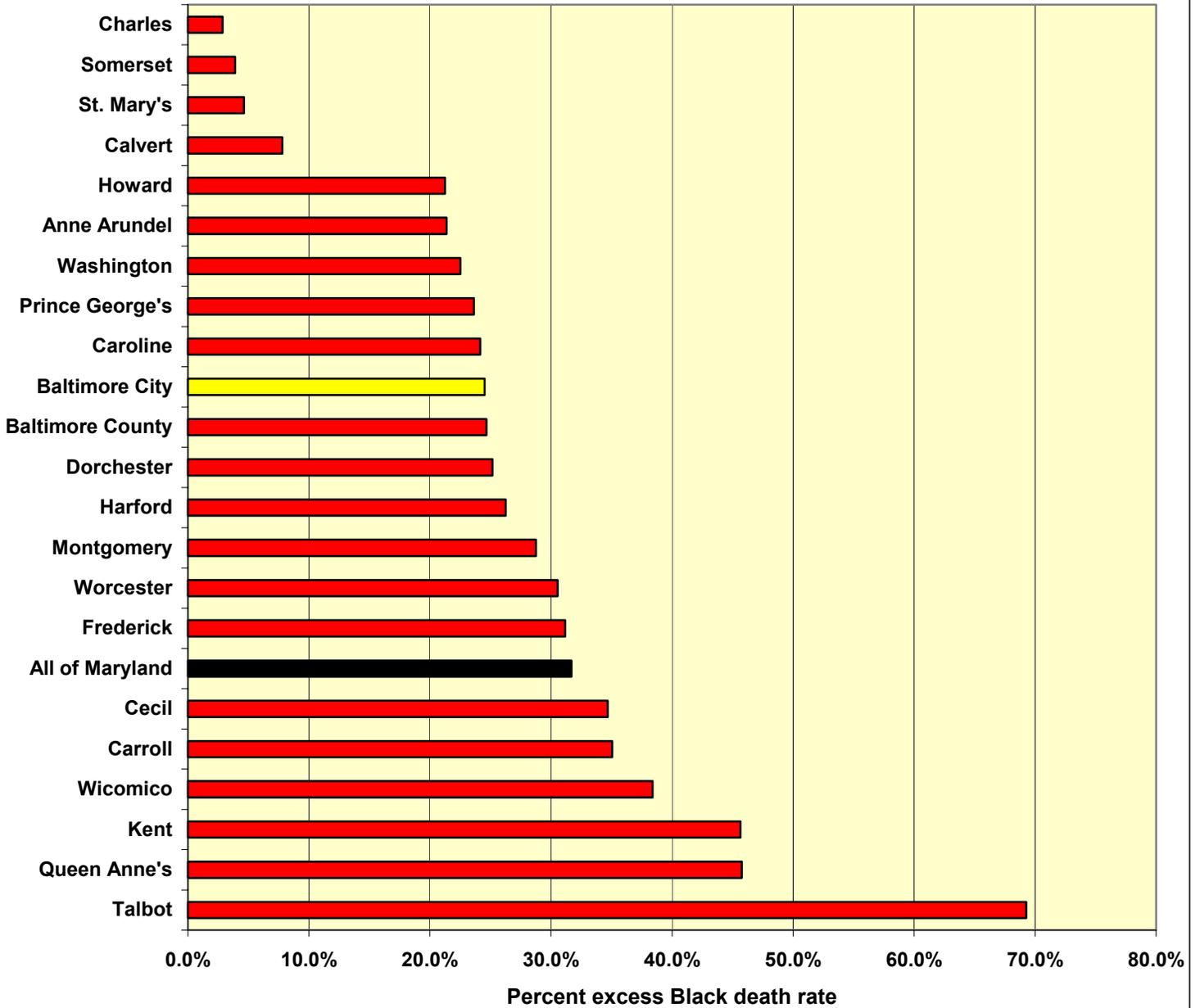
## Geographic Distribution of Mortality Disparities

- Data compiled by our Office of Minority Health and Health Disparities show that African American death rates exceed White death rates in all 22 Maryland jurisdictions where the age-adjusted rates could be calculated. **Twelve jurisdictions** have a larger Black vs. White mortality ratio than Baltimore City, and **five other jurisdictions** have ratios that are comparable to the City. The mortality disparity by jurisdiction could not be calculated for other minority groups.

**Figure 1. Age-Adjusted All-Cause Mortality (rate per 100,000) by White or Black Race and Jurisdiction, Maryland 2001- 2003 Pooled**



**Figure 2. Excess Black Death Rate (Compared to Non-Hispanic Whites)  
In Maryland, by Jurisdiction, 2001-03 Combined.**



*Age-adjusted to the projected U.S. 2000 population.*

**Age-adjusted death rates for Blacks could not be calculated for Garrett and Allegany Counties.**

Source: Division of Health Statistics, Vital Statistics Administration, DHMH

## Mortality Disparities

- Ten of the top 15 causes of death show a mortality disparity between Blacks and Whites.
- Black age-adjusted heart disease mortality exceeds that for whites by 52.4 deaths per 100,000 population.
- Blacks are 12.7 times more likely to die from HIV/AIDS than Whites.

### African American vs. White Mortality Disparity, 15 Leading Causes of Death, Maryland 2005

Ratio Disparity Rank	Excess Rate Disparity Rank	Statewide Cause of Death Rank	Disease	Age-adjusted Mortality per 100,000		Ratio	Age-adjusted Difference per 100,000
				Black	White		
7	1	1	Heart Disease	253.3	200.9	1.26	52.4
9	4	2	Cancer	207.7	185.7	1.12	22.0
7	8	3	Stroke	53.3	42.3	1.26	11.0
		4	Chronic Lung Disease	25.4	38.4	0.66	-13.0
6	3	5	Diabetes	43.1	21	2.05	22.1
		6	Accidents	24.8	24.7	1.00	0.1
10	10	7	Flu & Pneumonia	24	21.9	1.10	2.1
5	6	8	Septicemia	32.9	16	2.06	16.9
12	12	9	Alzheimer's Disease	15.2	18.3	0.83	-3.1
1	2	10	HIV / AIDS	26.6	2.1	12.67	24.5
4	7	11	Kidney diseases	23.7	10.6	2.24	13.1
2	5	12	Homicide	25.2	3.6	7.00	21.6
		13	Chronic Liver Disease	7.5	8.4	0.89	-0.9
		14	Suicide	4.6	10	0.46	-5.4
3	9	15	Certain Perinatal	9.9	3.8	2.61	6.1

Source: Maryland Vital Statistics Annual Report 2005

## **Disparities in Diabetes and Hypertension Burden**

Results from the 2001 through 2004 Behavioral Risk Factor Surveillance System (BRFSS) survey show that in Maryland:

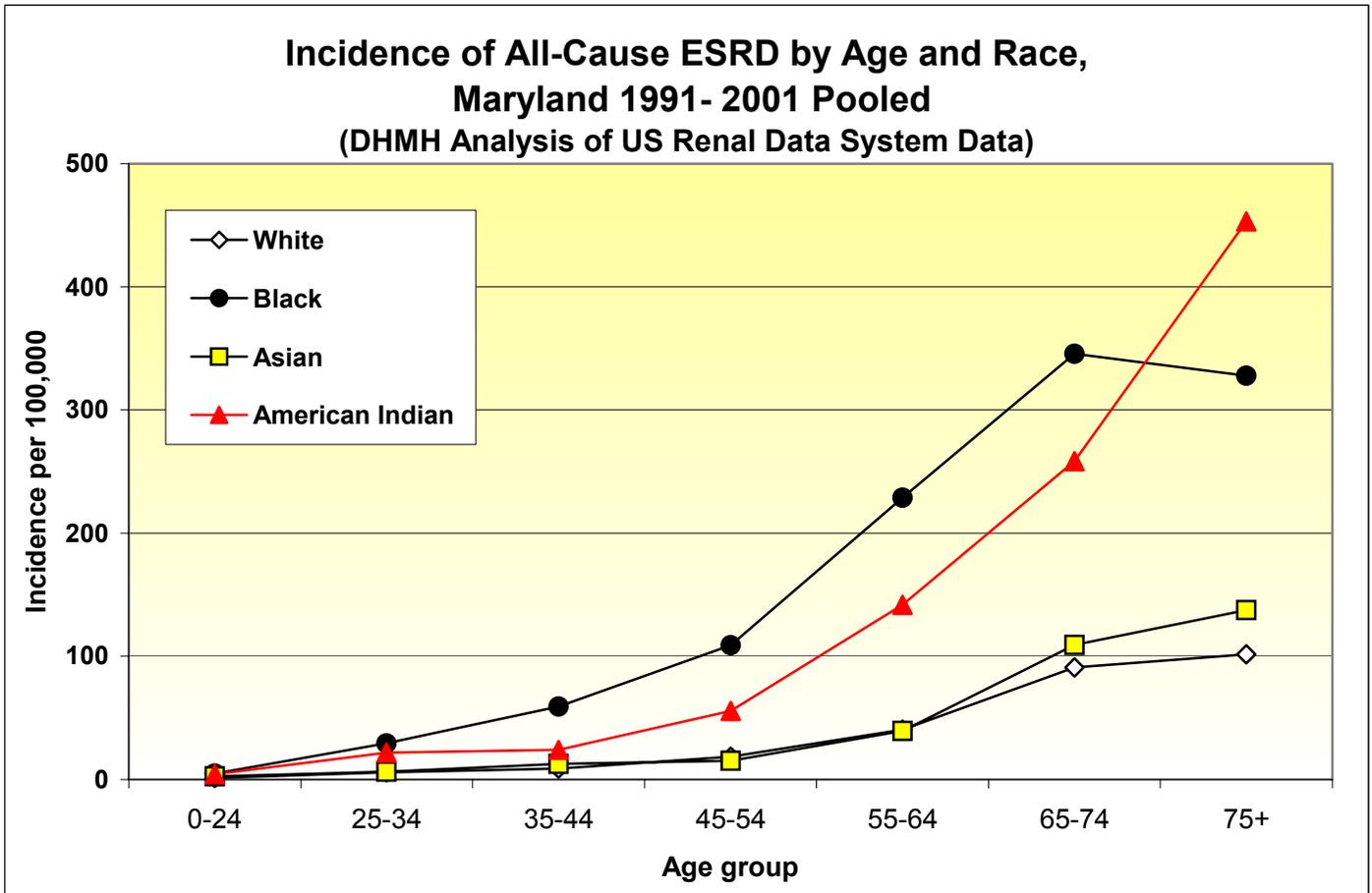
- African American adults have at least twice as much diagnosed diabetes as do White adults.
- Hispanic adults have at least 50% more diagnosed diabetes than White adults.
- In middle and older age groups, African American adults have 30% and 17% more diagnosed hypertension than White adults.

Because minority groups have less access to health care (data presented later in this document), more of the diabetes and hypertension burden among minorities goes undiagnosed. So the disparities in the burden of these diseases are probably even larger than the disparities in diagnosed disease presented above.

Small sample sizes in the BRFSS limit our ability to estimate the hypertension disparity for Hispanics, and both disparities for Asians and American Indians at this time. We are working on pooling additional years of BRFSS data in order to estimate these disparities for these groups.

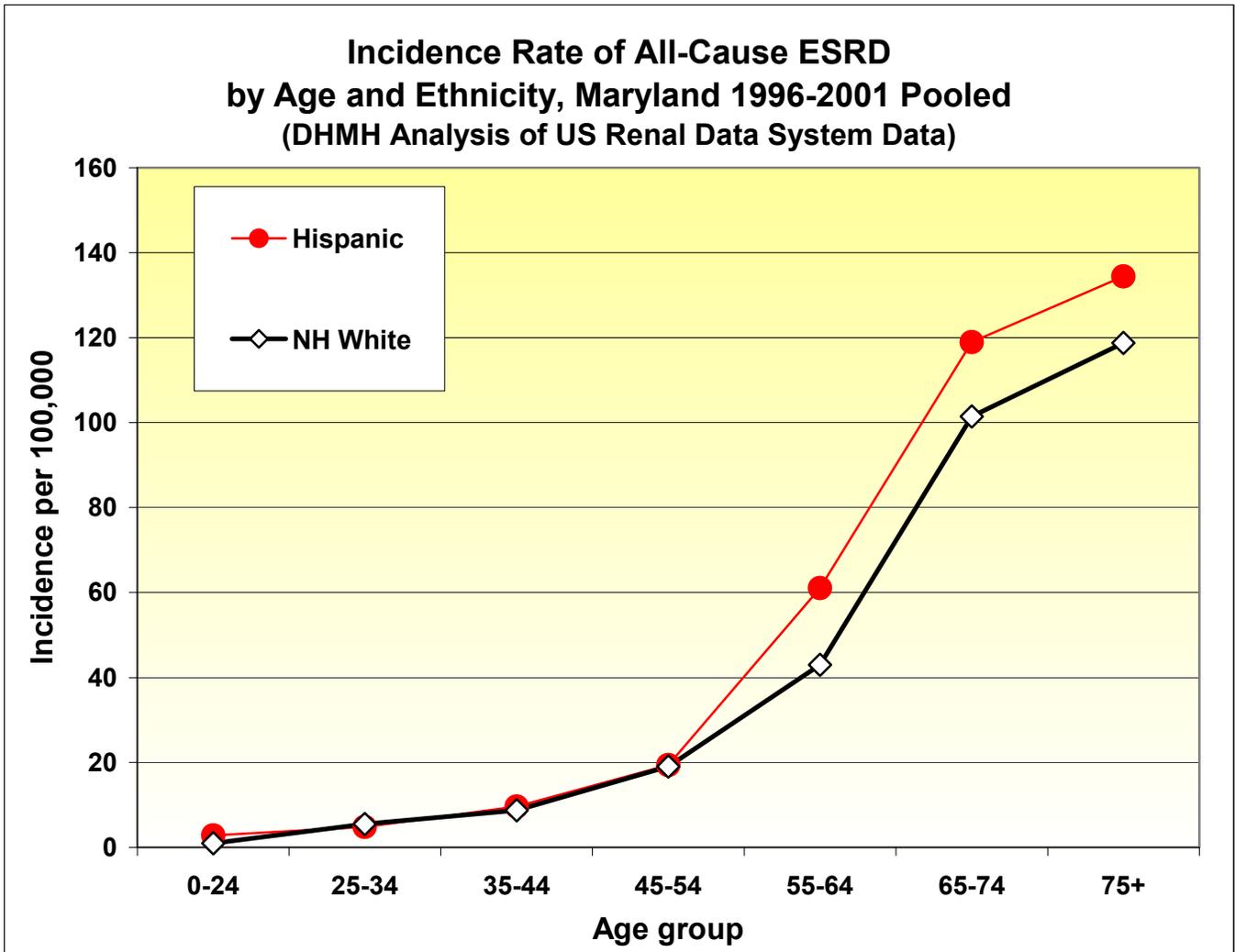
## Disparities in the Burden of End-Stage Renal Disease (ESRD)

Based on pooled data from 1991 through 2001, the rates of new cases of End-Stage Renal Disease (kidney disease, referred to as ESRD) in Maryland have been about three times higher for African Americans and Native Americans than for Whites.



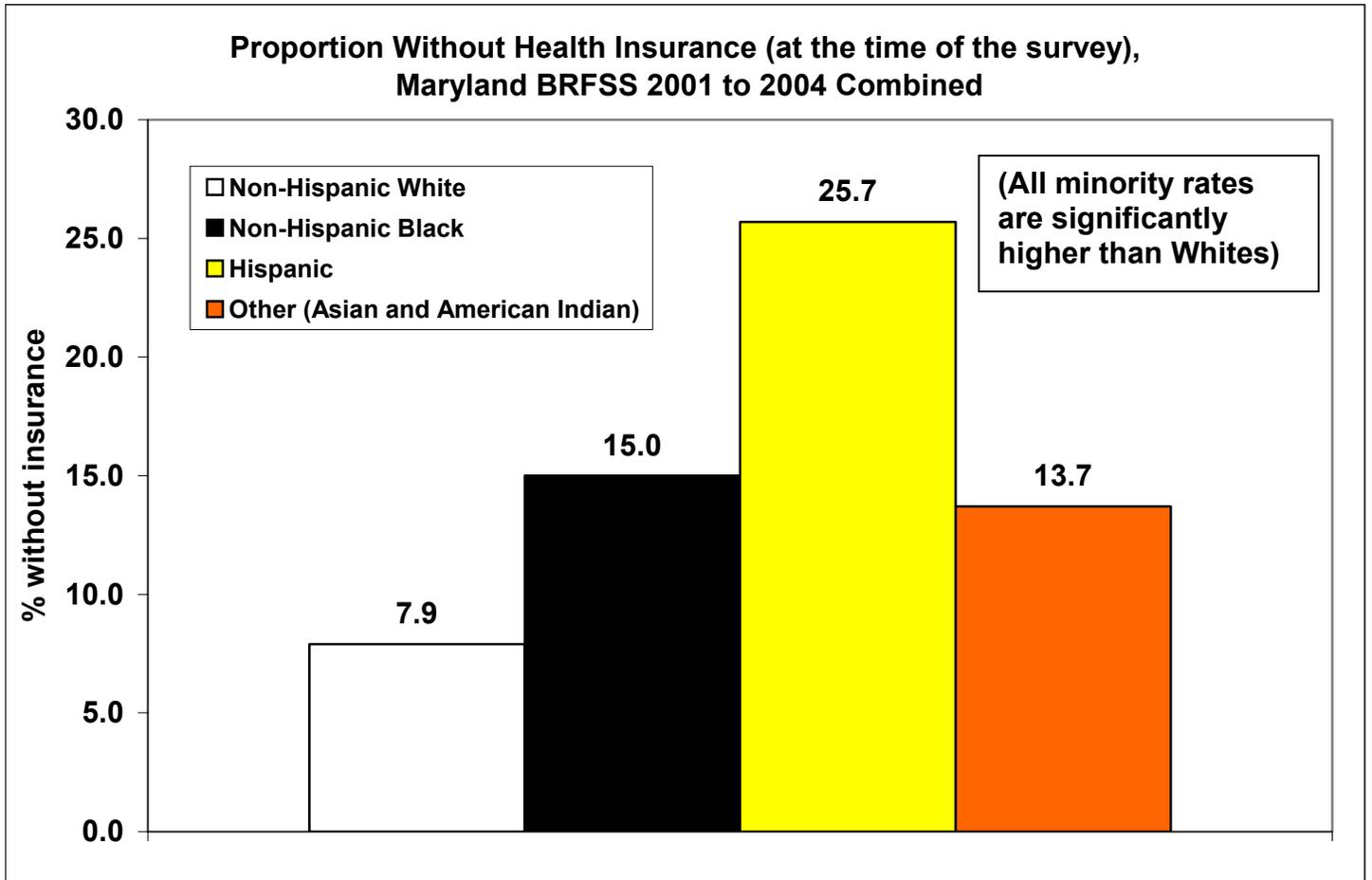
Since diabetes and hypertension are cause about two-thirds of all ESRD, the higher levels of ESRD in American Indians in Maryland suggest that they have higher rates of and/or poorer control of diabetes and hypertension than do Whites.

Based on pooled data from 1996 through 2001, the rates of new cases of End-Stage Renal Disease (kidney disease, referred to as ESRD) Maryland have been about 20% to 30% higher for Hispanics than for Non-Hispanic Whites in the age groups older than 54 years of age. (Hispanic ethnicity was not collected prior to 1996)

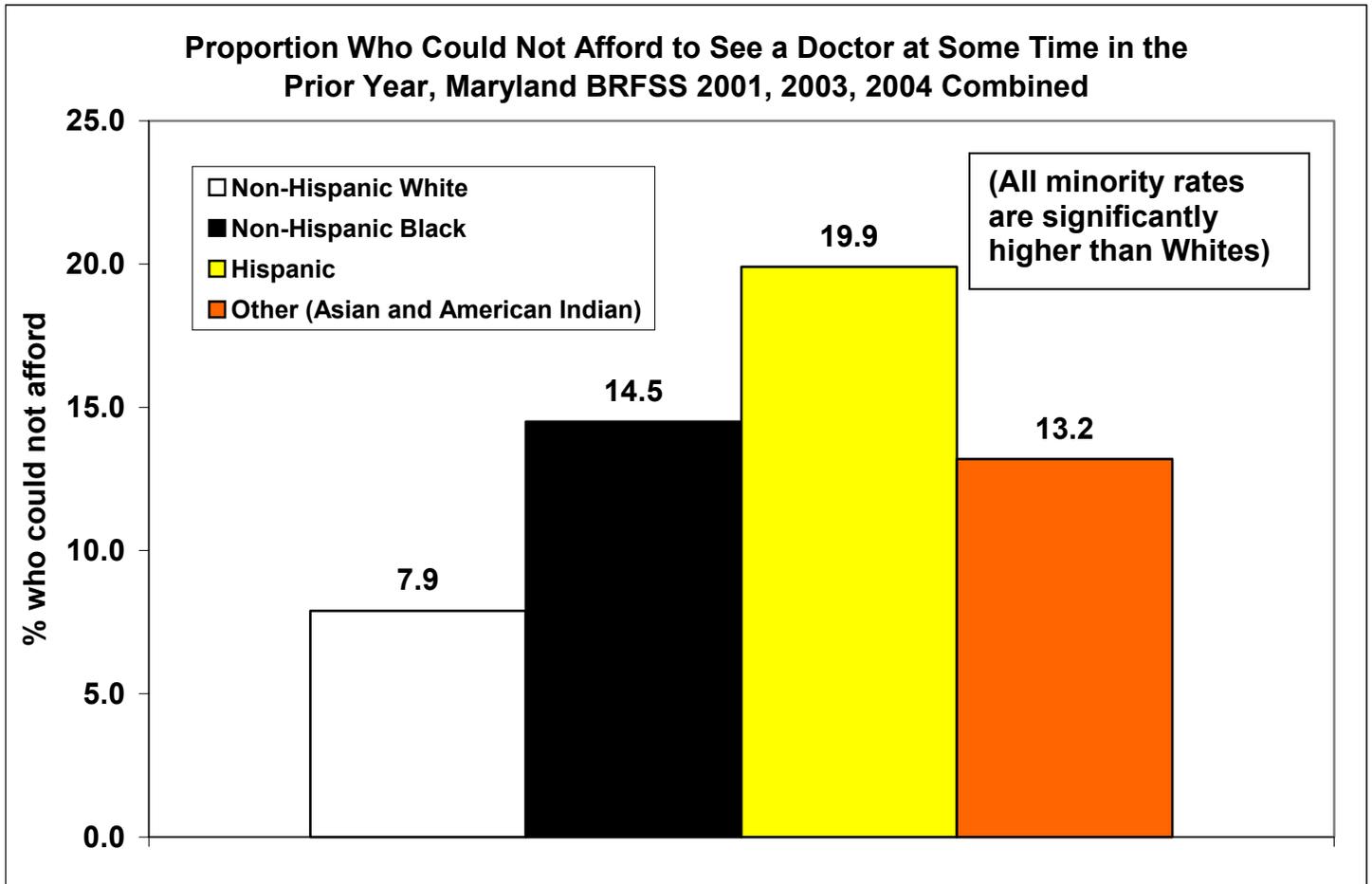


## Disparities in Health Care Access

Combining data from the 2000 through 2004 BRFSS, Maryland adults of all racial and ethnic groups were more likely to be without health insurance (at the time of the survey) than were White adults.

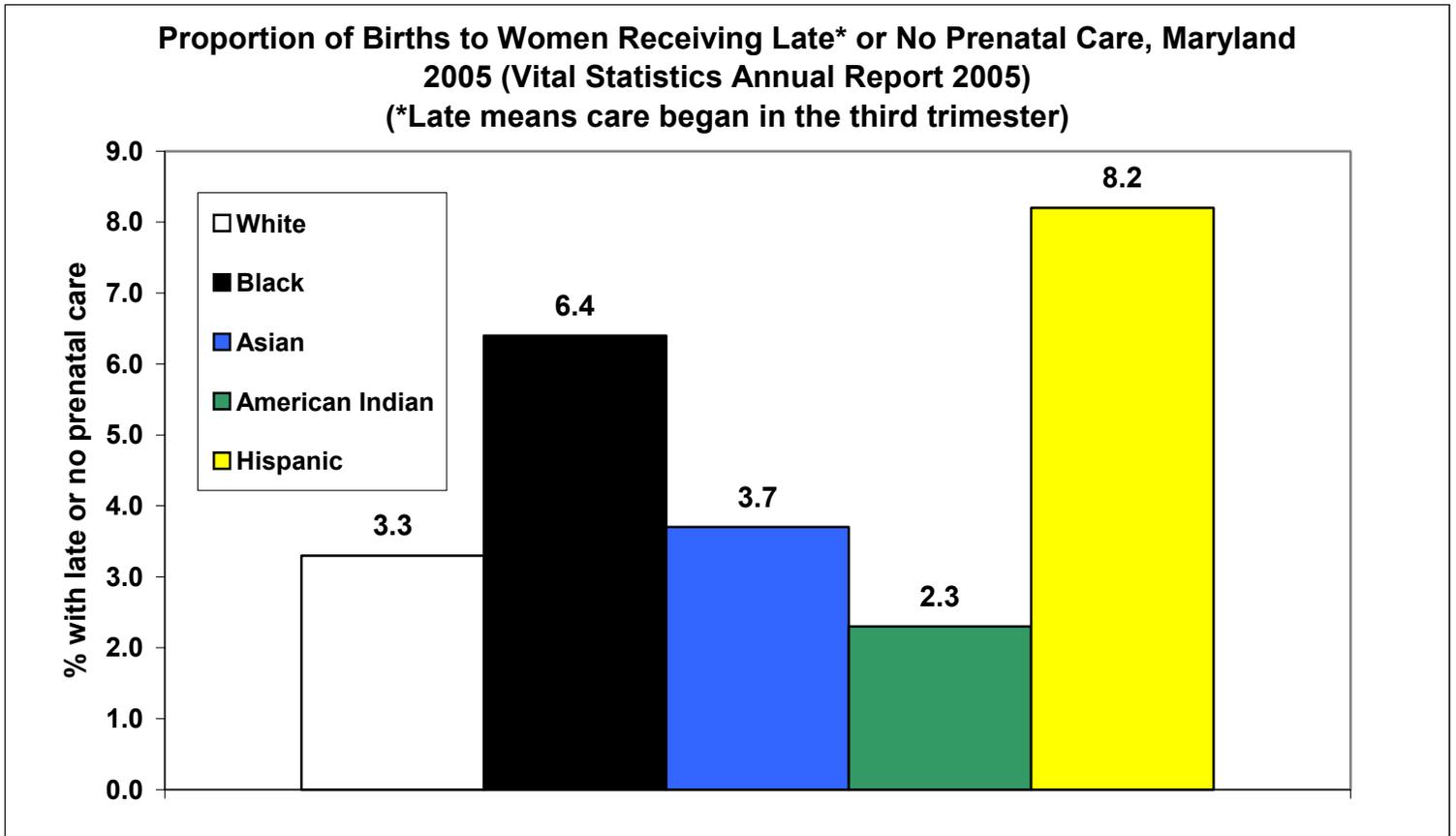


Combining data from the 2001, 2003 and 2004 BRFSS, Maryland adults of all racial and ethnic groups were more likely to be unable to afford to see a doctor (at some time in the prior year) than were White adults. (This question was not asked in 2002)



In 2005, compared to White women, the percent of births to women receiving late or no prenatal care was:

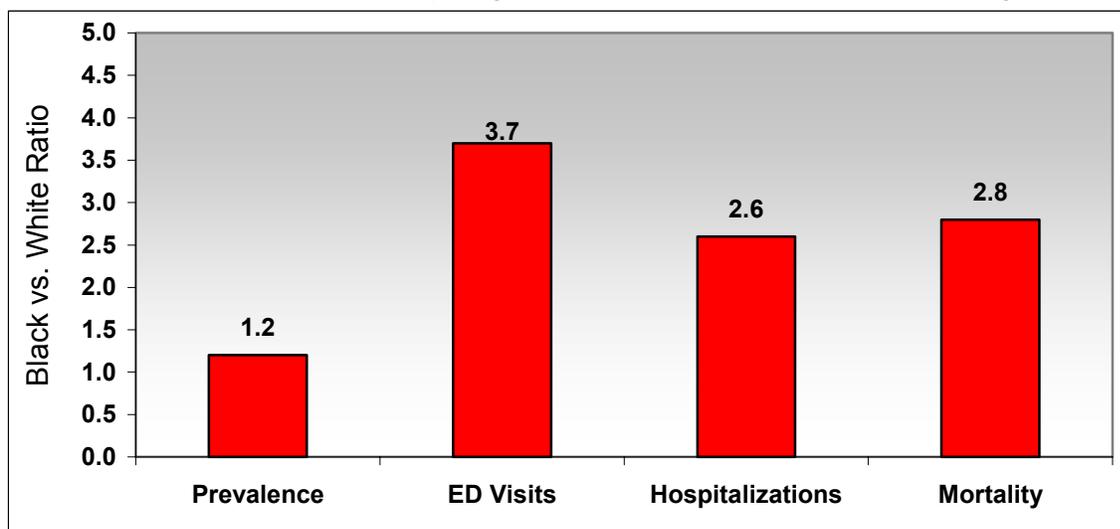
- About 2 times higher for African Americans and 2.5 times higher for Hispanic women, and
- About 12% higher for Asian women.



Note that during the eleven years from 1995 to 2005, the American Indian rate of late or not prenatal care exceeded the white rate in 8 of those years: only in 1996, 2002 and 2005 was the American Indian rate at or below to the white rate.

The relatively small size of Maryland's American Indian population results in large year-to-year fluctuations in statistics for that group. So the low rate for American Indians in 2005 is unfortunately not what is usually seen.

**African American vs. White Disparity Ratios for Adults with Asthma, Maryland 1999-2003**



Source: Asthma in Maryland 2004

**Expected Relative Risk of Asthma Hospitalization, if African Americans had equal asthma treatment success as Whites: 1.2 (matching the prevalence ratio).**

**Observed Relative Risk of Asthma Hospitalization for African Americans compared to Whites: 2.6**

**If the White hospitalization rate is X, the African American rate is 2.6X, but we expect 1.2X absent the treatment success disparity.**

**So the African American excess rate is 1.4X (2.6X – 1.2X)**

**1.4X / 2.6X = 53.8%**

**So 53.8% of asthma hospitalizations among African Americans are preventable if the disparity in asthma treatment success were eliminated.**

**How many Medicaid dollars were spent on how many African American asthma hospitalizations in 2004?**

**Total number of hospitalizations among African Americans where Primary diagnosis is asthma, and Primary payer is Medicaid = 492.**

**Preventable = 0.538 x 492 = 264 (Cost per admission = \$4636)**

**Total cost for hospitalizations among African Americans where Primary diagnosis is asthma, and Primary payer is Medicaid \$2,280,860**

$$\underline{\text{Preventable} = 0.538 \times \$2,280,860 = \$ 1,227,103}$$

**In addition, there were 62 admissions among African Americans on Medicaid where primary diagnosis is respiratory failure and any secondary diagnosis is asthma.**

$$\underline{\text{Preventable} = 0.538 \times 62 = 33} \quad (\text{Cost per admission } \$23,608)$$

**Total cost for these 62 admissions: \$1,463,714**

$$\underline{\text{Preventable} = 0.538 \times \$1,463,714 = \$ 787,478}$$

**Estimated Annual Medicaid Hospital Savings by eliminating asthma outpatient treatment disparity for African Americans:**

$$\underline{\$ 1,227,103 + \$ 787,478 = \$ 2,014,581}$$

## Success in Reducing Cancer Mortality Disparities in Maryland

### *Reduction in the Cancer Mortality Disparity for African Americans in Maryland, 2000-2005*

<b>Cancer Mortality Rates, Rate Differences, and Percent Change, By White or Black Race, Maryland 2000 and 2005 (rates are age-adjusted rates per 100,000)</b>			
	<b>2000</b>	<b>2005</b>	<b>Percent Decrease</b>
<b>Black Cancer Mortality</b>	<b>246.0</b>	<b>207.7</b>	<b>15.6%</b>
<b>White Cancer Mortality</b>	<b>201.6</b>	<b>185.7</b>	<b>7.9%</b>
<b>Mortality Difference</b>	<b>44.4</b>	<b>22.0</b>	<b>50.5%</b>

Source: Maryland Vital Statistics Annual Report 2005

- Since 2000, Tobacco settlement funds have been used in cancer control
- Awareness and screening activities were undertaken, targeting minorities
- Since 2000, the cancer mortality disparity has been cut in half:
  - White cancer mortality was reduced by 7.9%
  - African American cancer mortality was reduced by 15.6%
  - The mortality difference between the groups was reduced by 50.5%